

MEB Environment Baldovie Limited

**MEB Energy from Waste  
Combined Heat and Power Facility**

**Pollution Prevention and Control  
Permit Variation -  
Non-Technical Summary**

Issue | 29 March 2018

This report takes into account the particular instructions and requirements of our client.


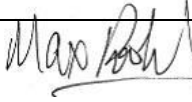

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Job number 245590-00

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# 1 Introduction

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## 1.1 Overview

This document is the Non-Technical Summary that accompanies the suite of documents<sup>1</sup> submitted to the Scottish Environment Protection Agency (SEPA) in support of an application by MVV Environment Baldovie Limited (MEB) (the Applicant) to vary the Pollution Prevention and Control (PPC) permit of the Baldovie Energy from Waste (EfW facility) Permit No PPC/A/1003157.

The varied permit would be for the operation of an Energy from Waste Combined Heat and Power Facility (EfW CHP facility) located to the south side of the current installation boundary and will replace the existing MEB EfW facility, (previously known as the DERL EfW facility). The existing EfW facility is close to the end of its economic life and is unable to operate in Combined Heat and Power mode. The replacement will provide a new, efficient facility that will last for at least 25 years and manage the residual waste from the Dundee and Angus areas, and provide a large quantity of energy in a sustainable, efficient and economical manner to the adjoining Michelin tyre factory and to the wider community through electricity fed into the grid.

The operation of the facility is regulated in accordance with the Pollution Prevention and Control (Scotland) Regulations 2012 (PPC Regulations), which implement Directive 2010/75/EU, on industrial emissions (integrated pollution prevention and control), the Industrial Emission Directive (IED).

This report summarises the application documents and should therefore be read in conjunction with the other supporting application reports and risk assessments.

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<sup>1</sup>Application documents include: Applications forms A, C and F; Supporting technical report; Emissions and impacts report; Site condition report; Air Quality report, Human health risk assessment report; Habitats risk assessment report; Noise report, Accident risk assessment; and Fugitive emissions assessment.

## 2 Application Summary

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### 2.1 Background to the Application

The Dundee City & Angus Residual Waste Project aims to fulfil the requirements of the Scottish Government's Zero Waste Plan, as a joint project being procured by the two local authorities. The project aims to provide a longterm solution for non- recyclable municipal waste produced in their areas.

MVV Environment Ltd (MEL) have been awarded the contract for the Dundee City & Angus Residual Waste Project and Planning permission was granted for the development of the new EfW CHP facility by Dundee City Council on 24 March 2017. MEL have established a subsidiary MVV Environment Baldovie Ltd (MEB) which will initially operate the existing MEB EfW facility during construction of the new EfW CHP facility on the land to the south of the existing EfW facility prior to the commissioning of the new EfW CHP facility.

### 2.2 The Proposed Facility

The new EfW CHP facility will be located on the Baldovie Industrial Estate, Dundee. The site is a brownfield site within an established industrial area, adjacent to the existing EfW facility and Michelin tyre factory.

The address of the proposed facility is:

Forties Rd  
Baldovie Industrial Estate  
Dundee  
DD4 0NS

The approximate National Grid Reference: NO 44583 32855.

A site location plan has been provided in Appendix A of this report.

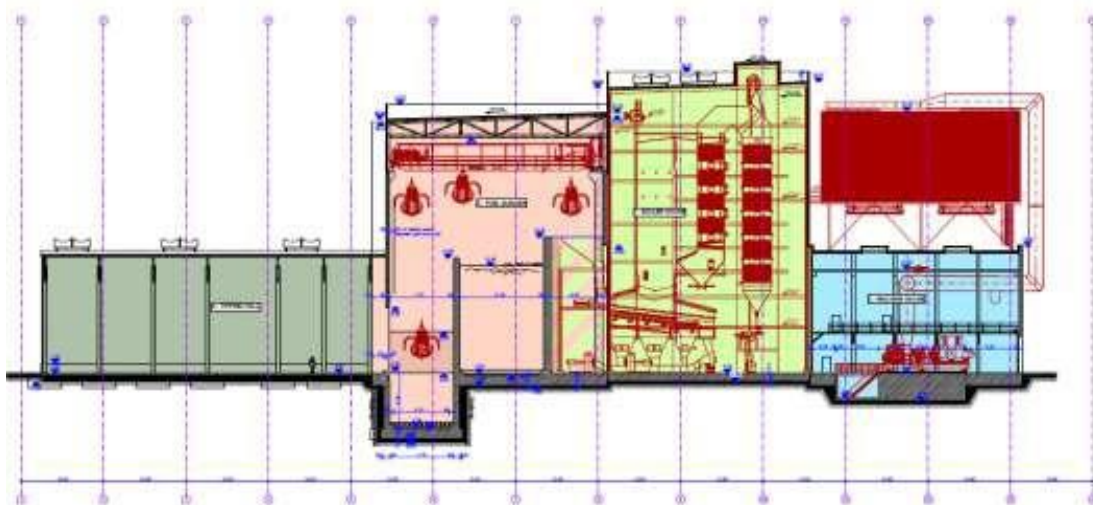
The proposed EfW CHP facility is designed to treat residual municipal solid waste and commercial and industrial waste streams of a similar nature following recycling. The new facility will include the following activities:

- Delivery of Municipal Solid Waste and Commercial and Industrial Waste, either into the waste tipping hall; or for waste collected from Household Clearances and direct collections from commercial premises into the existing EfW tipping hall where it can be screened and recyclable material removed;
- A waste reception and handling system which enables blending of the incoming wastes to produce a consistent waste fuel feed to the furnace and an optimised mass burn combustion process;
- The flue gases from the combustion processes will be used to produce steam to generate electricity via a steam turbine generator and to provide heat. The heat, in the form of steam, will be exported to the neighbouring Michelin tyre factory and the electricity to the local electrical distribution network;

- Flue gas treatment process, consisting of Selective Non-Catalytic Reduction (SNCR) for treatment of NO<sub>x</sub> and conditioned dry scrubbing of flue gases, using calcium hydroxide (Ca(OH)<sub>2</sub>) for treatment of acid gasses and powdered activated carbon (PAC) for treatment of dioxins and furans; and
- Raw material and residuals storage and handling;

The facility will have an operating capacity of 110,000 tonnes of waste per annum at an anticipated calorific value of 10.5 MJ/kg and an availability of 8,000 hours per year. A cross section of the EfW CHP facility, except for the chimney, is included in Figure 1.

**Figure 1 EfW CHP facility cross section**



## 2.3 The Applicant

The legal applicant ('the Applicant') is MVV Environment Baldovie Ltd, which is a wholly owned subsidiary of MVV Environment Ltd (MEL). MEL is in turn part of MVV Umwelt GmbH, part of the German utility company MVV Energie AG. MVV Umwelt provides flexible solutions for waste disposal, producing environmentally sustainable energy.

In Germany and UK, MVV Umwelt operates seven EfW and biomass facilities, managing 1.9 million tonnes of waste a year. With over 50 years' experience, MVV Umwelt is in the top three companies in Germany in its field. The MVV group has treated 2.3 million tonnes of waste in 2016 across Europe.

In the UK, MVV aims to replicate the success of MVV Umwelt in the German EfW sector. Having been awarded a long term contract for the treatment of residual waste in an EfW CHP facility in Plymouth, and having developed a waste wood biomass EfW facility in Kent, MVV is now using its extensive expertise in generating energy from residual waste to develop further projects in the United Kingdom market. The EfW CHP facility in Plymouth has an annual incineration capacity of 245,000 tonnes and has achieved a net energy efficiency in CHP mode which is in excess of 49%.

The applicant is considered to be a "fit and proper person" under the Pollution Prevention and Control (Scotland) Regulations 2012. The management of the facility will be in the hands of a technically competent person.

### 3 Site Condition

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The MEB EfW facility has been in existence since 2006 and the site to the south where the new facility will be constructed is presently vacant but was used as a recycling centre for waste arising from highway construction and maintenance until 2017. The proposed EfW CHP site is of rectangular shape, with approximate dimensions of 75m x 150m, and relatively flat topography. It comprises an area of open ground with some small areas on the perimeter containing stockpiles of materials from the former recycling activity. The ground surface is understood to comprise compacted granular material. There are two scrap yards immediately to the south of the site, a tyre factory to the south-east of the site and a number of industrial sites to the northwest.

Site investigations undertaken on and in the vicinity of the site indicate that the ground conditions at the location of the proposed EfW plant comprise made ground of up to approximately 3m, overlying alluvial and fluvioglacial deposits and sandstone and mudstone bedrock. Superficial deposits have been encountered up to 25m depth below existing ground level. Groundwater is anticipated at depths between 1.48m and 2.80m below existing ground level.

Historical ground investigations have previously identified potential sulphurous and hydrocarbon contamination within the made ground, however, the most recent investigation in 2016 encountered generally relatively low levels of contamination with the exception of localised asbestos and slightly leachable metals. Whilst localised further contamination could be present in areas of the site that were not encountered during the investigation, the available information does not indicate the presence of any significant, widespread ground contamination beneath the site.

Elevated levels of methane were also encountered within the soils on the site. The risk posed by existing contamination on the site is considered to be generally very low to low; increasing to low and moderate risks associated with asbestos and soil gas. It is considered that these risks could be mitigated to acceptable levels through appropriate design of the development and construction stage health, safety and environmental protection measures.

The proposed installation will result in a number of potentially contaminative materials being brought to the site, including liquid and powder raw materials, oils and lubricants, to be used in the processes. These materials will be stored in silos and containers which will prevent contamination of the ground and groundwater.

Following construction of the proposed development, the principal potential receptors for existing and future contamination are considered to comprise site workers and visitors, the underlying drift and bedrock aquifers and the nearby Dighty Water surface water course.

The proposed development will include extensive containment measures for the process areas which have the potential to release contaminants and these will limit the potential for spills or leaching of pollutants from the site directly to the underlying soils. The surface water drainage system will collect run-off from

roofs, site roads and other areas of permeable and impermeable surfacing where there is minimal risk of surface waters becoming contaminated by waste or other materials. The system will use various sustainable drainage system components (SuDS) such as suitably located permeable paving and filter drains which extend around the perimeter of the site and then connect into the Scottish Water surface water sewer system under Forties Road.

Appropriate health, safety and environmental mitigation and monitoring measures are proposed as part of the development, including bunding of tanks and use of level alarms and segregation of foul and surface water drainage systems.



## 4 Operating techniques

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### 4.1 In process controls

#### 4.1.1 Acceptance of Waste

The main purpose of the EfW CHP facility is to treat municipal solid waste (MSW) from the Dundee and Angus area which cannot be recycled, reused or composted. The facility will therefore primarily handle municipal waste collected by the Dundee and Angus local authorities. The remaining processing capacity will be used to treat similar commercial and industrial (C&I) waste from local businesses in the surrounding area.

Waste will be delivered to the facility in contained vehicles, including refuse collection vehicles (RCVs) and bulk transporters. Waste delivery vehicles will be directed from the gatehouse to either the EfW CHP facility tipping hall, for the majority of the waste, or to the EfW facility tipping hall, for bulky waste items that require pre-treatment prior to transport into the EfW CHP tipping hall.

#### 4.1.2 Tipping Hall

The tipping hall will serve as a reception area for the delivery of waste, ensuring that dust, noise and odour are kept away from the outside environment. The delivery vehicles will enter the tipping hall and unload the waste directly, via one of four chutes, into the waste storage bunker. In certain circumstances, drivers may be directed to tip into a designated quarantine area, located adjacent to the waste bunker, to allow a load to be inspected for non-conforming waste.

#### 4.1.3 Waste Bunker

The waste in the bunker will be continually mixed in the storage area by the waste cranes in order to ensure homogeneity and minimise fluctuations in calorific value. This will allow a certain amount of inspection of the waste as it is mixed.

#### 4.1.4 Waste charging

The waste will be fed by the waste crane directly into the furnace feed hopper. The feed will normally be operated by an automatic control system to ensure optimisation of the combustion process, by managing charging rates based on conditions within the furnace, and to prevent waste feed in the event of low temperatures in the combustion chamber or high emission levels monitored in the flue gas.

#### 4.1.5 Furnace

The combustion technology will consist of an inclined, reciprocating grate in which the grate bars are arranged as alternate rows of movable and fixed bars that are connected on a movable frame driven by hydraulic cylinders. This provides good waste agitation whilst preventing waste from tumbling down the forward inclined grate, therefore optimising the combustion process.

Combustion will be controlled and optimised by the automated combustion control system. The combustion temperatures will be maintained at a minimum of 850°C for a residence time of at least two seconds, in line with the IED, through optimised control of the combustion process parameters.

#### **4.1.6 Boiler House**

A four-pass vertical water tube boiler, specifically designed for the required duty, will be located above the grate. The first two passes of the boiler are designed as empty passes, allowing the flue gas to cool down below the melting point of the fly ash particles, thereby avoiding accumulation on the convective heating surfaces. The flue gas passes the super heaters in the third pass, and the economizer heating surfaces in the fourth pass. The economiser sections of the boiler will reduce the flue gas exit temperature to the optimum required for the flue gas treatment process and preheat the boiler feed water for increased efficiency.

#### **4.1.7 Steam turbine**

The steam produced in the boiler will drive a steam turbine to generate renewable electricity, for use at the facility and for export to the grid. Steam will also be extracted from the turbine and fed into the Michelin tyre factory steam network to be used for process and heating purposes.

#### **4.1.8 Control Room**

A continuously manned control room will be provided in the waste bunker hall, from which the facility will be operated and monitored.

### **4.2 Emission Control**

All appropriate preventative measures will be taken against pollution, in particular through application of the best available techniques. No significant pollution is likely to occur. In this section, preventative and mitigation measures for emissions are set out.

The facility will be equipped with an advanced Continuous Emissions Monitoring System (CEMS), which will be capable of continuously monitoring and recording the following parameters;

- Carbon Monoxide (CO);
- Oxides of Nitrogen (NO<sub>x</sub>);
- Total Organic Compounds (TOCs);
- Particulate matter;
- Hydrogen Chloride (HCl);
- Hydrogen Fluoride (HF); and
- Sulphur Dioxide (SO<sub>2</sub>)

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The CEMS will be subject to regular controlled testing by means of an annual surveillance test (AST) in accordance with the relevant British Standard (BS EN 14181). This will be undertaken by an approved organisation accredited to BS EN ISO 17025.

Analytical techniques will be undertaken on the emissions to water, as agreed with Scottish Water and in accordance with the parameters required by the permit. These are expected to include:

- continuous measurements of pH, temperature and flow;
- measurements of total suspended solids in accordance with permit requirements;
- In the event that sampling and analysis is required, then the following reference standards will be employed:
- Continuous emissions monitoring will be undertaken using equipment certified to SEPA's monitoring certification standard; and
- Analysis will be undertaken by independent testing organisations that are accredited to SEPA's Monitoring Certification Scheme.

#### 4.2.1 Point source emission to air

The emission from the EfW CHP facility will be discharged via the 90m high chimney.

The facility has been designed to ensure that the emissions from the facility will comply with the IED Emission Limit Values (ELV) and will not result in local air quality exceeding national air quality objectives.

The control of combustion emissions within the flue gases will be achieved by:

- Optimised combustion control;
- Selective Non-Catalytic Reduction (SNCR) for removal of nitrogen oxides, by injection of urea into the combustion chamber;
- Conditioned dry scrubbing of flue gases using calcium hydroxide to neutralise the acid gases;
- Injection of powdered activated carbon, for adsorption of dioxins and furans; and
- Use of a bag filter, for retention of pollution control reagents and particulates.

A detailed air quality assessment has been undertaken to inform the appropriate chimney height which will ensure sufficient dispersion of emissions is achieved, and has confirmed that emissions will not exceed the limits set out in the Air Quality (Scotland) Regulations 2000, the Air Quality (Scotland) Amendment Regulations 2002 and the Air Quality (Scotland) Amendment Regulations 2016.

## 4.2.2 Point source emission to surface water and sewer

Process waste water will consist of boiler water blowdown and waste water from the demineralised water treatment plant. It will primarily be used for ash cooling, however excess quantities may need to be discharged to sewer.

All process waste water will be collected and passed into the process waste water basin. Due to the build-up of minerals in the process waste water, this may require treatment prior to final discharge to meet the conditions of the discharge consent to be agreed with Scottish Water. Following treatment, the excess process waste water will be pumped into the foul water drainage system which discharges to the existing foul water sewer under Forties Road. It is not considered that there will be a significant level of emissions in the process waste water following treatment.

The surface water drainage system will collect run-off from roofs, site roads and other areas of permeable and impermeable surfacing where there is minimal risk of surface water becoming contaminated by waste or other materials. It will be drained using various sustainable drainage system components such as suitably located permeable paving, filter drains and attenuation ponds, prior to discharge to the Scottish Water surface water sewer. It is considered that the contained nature of the site will ensure that contamination of surface water is minimised.

## 4.2.3 Odour

The potential odour and dust emission sources from the proposed development comprise:

- The tipping hall; and
- The waste storage bunker.

Waste tipping will be carried out within the contained environment of the tipping hall where the waste will be tipped into the waste storage bunker.

The odour emission from the waste will be contained within the building due to the negative pressure created by the internal air extraction for use in the combustion process, which will be drawn from the waste bunker and tipping hall for use in the combustion process. A single fast acting door capable of opening and closing inbetween vehicle movements will be provided. In periods of intensive traffic movements, the door will remain open. If a vehicle is not detected within a certain time period, the door will close. The door will remain closed during the periods outside of normal delivery hours.

During periods when the combustion process is shut down for maintenance, air from the tipping hall and waste bunker will continue to be extracted through a separate activated carbon and dust filter and vented from a discharge at the top of the facility building, to mitigate the potential for odour release during shutdowns of the facility.

## 4.3 Management Control

The facility will be operated under the MVV Integrated Management System (IMS). All MVV EfW CHP Facilities and Biomass Power Plants (BPP) are operated under the IMS and MVV is therefore familiar with operating within the context of an International Organisation for Standardisation certified management system.

The facility will apply for and implement certification under the following standards: ISO 9001:2008, ISO 14001:2004 and OHSAS18001:2007 during the first year of service delivery.

#### 4.4 Raw materials use

Raw materials used at the facility will be periodically reviewed to ensure that they are all appropriate for use and that consumption is optimised. Waste minimisation, in relation to use of raw materials, has been included in the design process and regular waste minimisation audits will be undertaken to promote efficient use of raw materials.

The facility has been designed to minimise water consumption by using closed loop systems, such as the air-cooled condensing system for the steam from the turbine, and by reuse of waste process water for ash cooling. The primary use of water in the installation will be for boiler feed water make up. The source of the water will be the mains potable water supply, with the predicted consumption being 45,000m<sup>3</sup> per annum (5 to 6m<sup>3</sup> per hour).

#### 4.5 Residual waste management

Residual waste produced by the EfW CHP facility will include an estimated 26,400 tonnes per annum of Incinerator Bottom Ash (IBA) and 3,850 tonnes per annum of Air Pollution Control residue (APCr).

The IBA will be stored in the ash bunker and transported off-site in covered vehicles. The IBA will be tested periodically in accordance with permit requirements to confirm that it is not hazardous and to establish the physical and chemical characteristics to determine disposal or potential for recycling. The IBA will be taken for recycling by JD Laing Ltd at their Waste Recycling Facility at Petterden.

The APCr from the bag filter, containing the reaction products from flue gas treatment including activated carbon with the adsorbed metals and organic compounds is considered hazardous waste. It will be transported offsite in dry powder bulk tankers, to the William Tracey Hazardous Waste Treatment site at Dunniflats, East Ayrshire and following treatment will be transported for disposal at an appropriately permitted landfill site. The APCr will be tested periodically in accordance with permit requirements to confirm its physical and chemical characteristics.

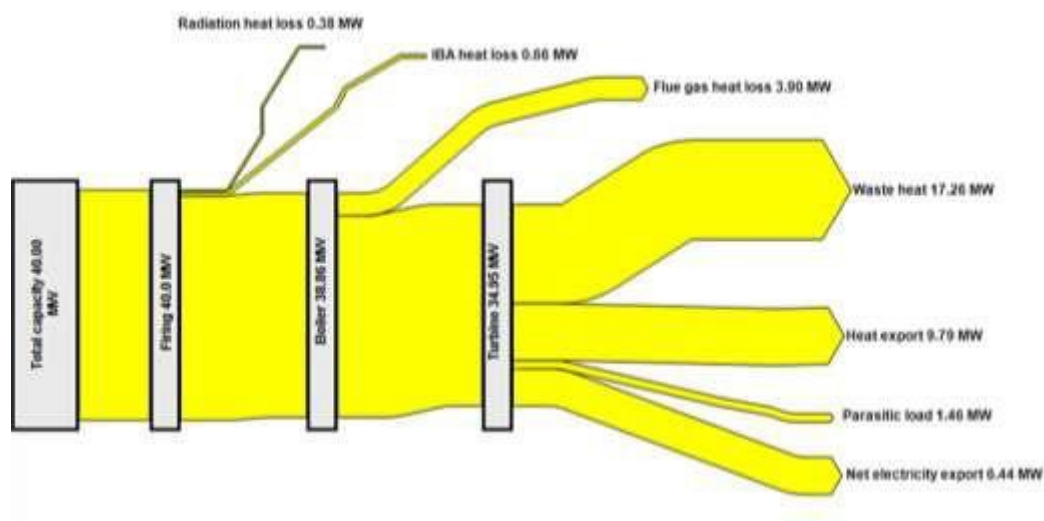
#### 4.6 Energy

The EfW CHP facility will generate electricity via a steam turbine generator and heat, in the form of steam. Some of the steam will be exported to the neighbouring Michelin tyre factory for heating and process use and the electricity will also be used by Michelin or exported to the local electrical distribution network.

The design thermal capacity of the plant is 39.9MW<sub>th</sub> or 79,248MWh<sub>th</sub> based on 8000 operating hours per year. The design thermal capacity of 39.9MW relates to the design waste throughput of 110,000 tonnes per annum (t/a), at the Lower Calorific Value (LCV) of 10.5 MJ/kg. If the waste feedstock had a lower LCV the mechanical throughput could be as high as 18.750 tonnes per hour. A Sankey

diagram for the facility, operating when the anticipated annual heat output is exported to Michelin, is provided in Figure 2.

**Figure 2 Sankey (energy flow) Diagram for EfW CHP facility - anticipated heat output is exported to Michelin**



When the EfW CHP facility operates in CHP mode with the anticipated heat output to Michelin the net efficiency of the plant is 40.6%.

If the facility operates in power only mode, with no heat export, then the net efficiency is 21.8%. If it was to operate with maximum possible CHP output the plant efficiency would be 59.6%.

## 4.7 Accidents management

An accident risk assessment for the facility has been produced which identifies the likelihood and consequences of accidents and identifies actions for the prevention and mitigation of all identified risks. This assessment forms the basis of the facility's accident management plan.

The prevention and mitigation measures will be incorporated into the site management processes, and site operatives will be made aware of these measures during training.

The detailed design of the facility will be carried out by MVV's specialist contractors and overseen by MVV's engineers, who have extensive experience with the planning, design, build and operation of similar facilities. Ongoing assessment of accident and safety risks will be carried out throughout the detailed design, including a study which will examine issues such as:

- The use of emergency shutdown systems and electrical trips;
- Gas, fume, dust and liquid detection;
- Firefighting systems;
- Containment of releases; and
- Emergency escape.

## 4.8 Control of Major Accidents and Hazards Regulations 2015

The installation is not situated on a site for which a major accident prevention policy document is required under regulation 5 of the Control of Major Accident Hazards (COMAH) Regulations 1999.

Both light heating oil and hydraulic oil fall under Item 24, Part 1, Schedule 1 of the COMAH Regulations 2005, however both will be stored on site at quantities below the lower tier threshold of 2,500 tonnes.

The calibration gases will include mixtures of oxidising gases, listed under Item P4, Part 1, Schedule 1 of the COMAH Regulations 2005. These gases will be stored on site at quantities below the lower tier threshold of 50 tonnes.

## 4.9 Site Closure

Following commencement of operations MVV will prepare and maintain, in accordance with the permit requirements, an outline decommissioning plan for the EfW CHP facility with an aim to ensure that pollution risk is avoided and the site is returned to a satisfactory state.

The plan will set out the steps to be taken by the Operator after final cessation of the Permitted Activities which will include the removal of all waste from the site.

The plan will consider the cleaning out of all infrastructure including site drainage and sub-surface tanks. Consideration of the need for testing of ground conditions will also be incorporated into the plan, based on the operational, accident and pollution reports maintained during the operational life of the facility.

## 5 Environmental assessments

### 5.1 Overview

Operation of the EfW CHP facility would result in point source emissions to air and to water. In addition to this there is the potential for fugitive emissions to air, water and land and release of odour and noise emission from the site. Each point source emission is identified in Table 1.

**Table 1 Inventory of point source emissions.**

Release Point	Source	Grid Reference
<b>Air</b>		
A1	EfW CHP facility chimney	344637,732880
A2	Shutdown ventilation system outlet	344593,732844
<b>Water</b>		
W1	Wastewater discharge to foul sewer	344525,732831
W2	Surface water discharge to surface water sewer	344515,732860

### 5.2 Assessments

The assessment of the potential impact due to the operation of the proposed EfW CHP facility was undertaken using a number of techniques, including:

- Air quality assessment;
- Human Health risk assessment;
- Habitats risk assessment;
- Noise assessment; and
- H1 software tool.

The proposed EfW CHP facility will use the best available techniques (BAT) to comply with the required emission limits and will include the required odour management. Emissions from the stack will be measured and continuously recorded as part of a Continuous Emissions Monitoring System (CEMS). The results will be available for SEPA and Dundee City Council to inspect so that it can be confirmed that the emissions are within the permitted limits. The emissions from the stack will also be published on MEB's website.

The impact of the EfW CHP facility on air quality at human and ecological receptors, and on odour, has been found to be not significant. A human health risk assessment demonstrated that the maximally exposed individual would not be subject to a significant carcinogenic risk or non-carcinogenic hazard, arising from exposures via both inhalation and the ingestion of foods.



### 5.2.1 Habitats risk assessment

A Habitats Risk Assessment (HRA) screening exercise was carried out to assess the potential for the EfW CHP facility to impact on European designated wildlife sites located within 15km of the facility.

The exercise assessed the magnitude of the pollution that would arise from the facility, the pollution pathways to each of the designated sites and the resulting potential for impacts on the sites' designations due to the operation of the facility. The assessment considered both the air quality concentration at the European designated sites and the potential for adverse nutrient and acidity impacts due to nitrogen and sulphur deposition on habitats within the European sites.

The impact of the EfW CHP facility on ecological receptors, due to air quality concentration at the European sites, was found to be negligible. Further to this, the assessment found that the existing deposition rates would not be adversely affected at European designated sites as a result of the operation of the proposed EfW CHP facility.

In summary, the assessment found no significant adverse impacts as a result of air pollution or deposition associated with the operation of the EfW CHP facility on European sites.

### 5.2.2 Noise assessment

A noise study was undertaken to assess the noise emissions from the EfW CHP facility and compare them to the current EfW facility. The noise emissions were determined based upon previously measured data and the experience of Muller- BBM in similar projects.

The assessment considered the current baseline noise emission from the EfW facility, the future predicted noise emission from the proposed EfW CHP facility and the expected sound pressure (noise) levels at sensitive receptors in close proximity to the facility.

The noise study concluded that the new facility would not have an adverse impact on the noise levels at the receptors assessed, when compared to the noise associated with the existing EfW facility. The expected sound levels at all of the receptors would be below the limit values set out in SEPA's guidance for noise assessment and control, during both daytime and night time operations.

Consequently the changes in noise emission due to the operation of the proposed EfW CHP, in comparison to the existing EfW facility, are considered to be insignificant.

### **5.2.3 H1 Software Tool – Emissions to surface water and sewer**

Process water would be produced during the operation of the facility, as boiler water blowdown and wastewater from the demineralisation of potable water, to produce the boiler feed water. The process water may be discharged into the foul water drainage which discharges to the existing Scottish Water foul water sewer under Forties Road.

The surface water drainage system would collect run-off from roofs, site roads and other areas of impermeable surfacing where there is negligible risk of surface waters becoming contaminated by waste or other materials.

It is considered that, given the control measures that would be in place, there would be no risk of fugitive emissions to surface water, sewer or groundwater arising from the Facility's activities.

### **5.2.4 Environmental assessment conclusion**

The assessment undertaken found that the operation of the proposed EfW CHP facility would not result in any significant detrimental effects on air quality, human health or ecological receptors.

In addition the operation of the proposed EfW CHP facility would not result in any increase in the impact of noise emission to sensitive receptors, when compared to the current EfW facility.

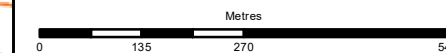
## Appendix A – Site Location Plan



Legend

Site Location

P0	2017-05-26	BS	MR	MR
Issue	Date	By	Chkd	Appd



# ARUP

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Client

**MV Environment Baldovie Limited**

Job Title

**Dundee & Angus Energy from Waste Combined Heat and Power Facility**

Drawing Title

**Dundee EFW CHP Facility PPC Permit Site Location Plan**

Scale at A3

**1:10,000**

Job No	Drawing Status
<b>245510-00</b>	<b>For Information</b>

Drawing No	Issue
<b>SK-E-001_Appendix A</b>	<b>P0</b>